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ABSTRACT

A three-year longitudinal study of student support service programs prepared for the U.S. Department of Education indicated that peer tutoring during the first year of college has a positive and statistically significant impact on students in each of three outcome areas: grades, credits, and retention, and that participation in the first year has an even bigger payoff for students than in later years. The report examined five key issues in the design and implementation of tutorial services: (1) institutional context, or awareness of how the program's structure influences student learning and persistence, as well as how tutorial services contribute to the campus climate; (2) tutor selection, training, and support; (3) program evaluation and outcomes; evaluations can focus on short-term student outcomes directly related to tutoring (grades and grade-point averages) as well as longer term outcomes such as retention; (4) noncognitive factors such as the ability of staff to assess students' initial reactions to academic difficulties and their readiness to make changes; (5) cognitive factors; successful programs also provide course content while helping to improve student learning styles. Examples from current programs at Drexel University (Pennsylvania), Luther College (Iowa); University of Wisconsin-Eau Claire; and Southwest Texas State University illustrate key points in the monograph. (Contains 20 references.) (MAB)

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The National TRIO Clearinghouse, an adjunct ERIC Clearinghouse on Educational Opportunity, collects and disseminates information, applied program materials, resources and research related to TRIO Programs and TRIO students. The Clearinghouse focuses on issues of educational opportunity and access to higher education for low income, first generation participants and students with disabilities. TRIO Clearinghouse services include reference and referrals; a web site at URL: "http://www.trioprograms.org"; publications and bibliographies; presentations; and symposia. The Clearinghouse is housed at the Center for the Study of Opportunity in Higher Education, a program of the National Council of Educational Opportunity Associations. The National TRIO Clearinghouse is funded by a grant from the United States Department of Education.

Providing Effective Tutorial Services

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FORWARD

Interest in student retention has not waned. If anything it has increased over the years as more and more states have moved to require colleges and universities to report and in some cases, be accountable for improvements in student retention. Nowhere is this movement more strongly felt than among those institutions that are least prepared to meet the many academic and social demands college life imposes. And nowhere is the need for effective action more urgent. "At-risk" students are our future. Their success is our success.

But as many institutions have discovered, improving student retention is no easy matter, especially among "at risk" students. Though real gains are possible, they take time and the investment of considerable faculty and staff energies. This is the case because enduring gains in student retention require institutions to rethink and in some case, substantially change, the way they go about the important task of educating their students. We must not forget that student education is the source of student retention, enhance student learning and the vehicle through which improved retention arises.

But while we have focused on student learning generally, only recently have we given serious attention to education and retention on our campuses. Three new monographs published by the National TRIO Clearinghouse represent a needed step in that direction. These monographs focus on three important areas of institutional action namely, first-year programs, tutoring and campus cultural activities.

The monograph by Lana Muraskin, entitled A Structured Freshman Year for At-Risk Students focuses on the critical first year of college and the need for structured first-year programs which help students make a successful transition to college. It provides a detailed description of the elements of a structured first-year program for "at-risk" students as well as real world examples of programs in four different institutions of higher education. In the monograph entitled Providing Effective Tutorial Services, Joyce Weinsheimer speaks to the character of effective tutoring and its place in an integrated approach to student assistance. Drawing upon examples from several institutions, she details the attributes of effective tutorial services. In so doing, she argues that tutorial services need to work with other areas of the institution to build a campus climate that promotes student success. Patrick Velasquez speaks more directly to issues of campus climate, specifically the role of cultural activities in promoting the inclusion of underrepresented groups on campus. In his monograph Cultural Activities and Campus Involvement, Velasquez draws upon theories of student involvement and persistence and case studies of strategies employed in four divergent higher educational settings to demonstrate how cultural activities can involve and serve to validate under-represented groups on campus. Such involvements, he argues, are part and parcel of student success on campus.

Though there are other issues involved in promoting the success of "at-risk" students in higher education, such as those pertaining to teaching and advising, these monographs will help to advance our thinking about some of the elements of effective programs.

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Tutoring has proven to be a popular academic support service for students in higher education. Because many students discover that their academic background and study skills have not adequately prepared them for the demands of college learning, they often find themselves in situations where they want to bridge the gap between what they currently know and what they need to know in order to understand and apply the concepts in a particular course. Then too, students who are low-income, first generation college-goers, and individuals with disabilities often question how to succeed in course work that is different than what they experienced in earlier educational settings. How do you learn in a lecture hall filled with 500 students? How do you know what's important when your assigned reading for one class exceeds 200 pages? Colleges throughout the country have typically responded to these requests for academic support from their increasingly diverse clientele by developing various types of tutorial services--peer tutoring, faculty or professional tutoring, computerized tutoring, one-on-one tutoring, and small group tutorials. But how helpful are tutorial programs? Do tutorial services really promote learning? What is their potential for increasing a student's academic success and persistence in college?

This monograph will address these issues by first exploring the rational for using tutorial services to improve the academic success and persistence of students in higher education, then discuss the key elements of an effective tutorial program on a campus. Examples from current Student Support Service programs will illustrate both the challenges and the possibilities that accompany the decision to implement a tutorial services program on a campus.

Rationale for Tutorial Services

Providing tutoring for students who are interested in academic improvement is not a new idea, but now new research is showing that it is a good idea. We've known for several years that lack of success in course work is one of the major reasons that students leave college, and current research suggests that academic dismissals seem to be increasing (Tinto: 1996). We're also learning that not all retention programs designed to help students persist to graduation are achieving that goal. Too many efforts, while well-intentioned, are non-academic in nature and are failing to make a positive contribution to the academic experience of students during their critical first year of college (Tinto: 1996).

Receiving tutoring can make a difference. Participating in an effective peer tutoring program can lead to an increase in GPA, an increase in credits earned and persistence in college. In the three-year longitudinal study of Student Support Services

recently prepared for the U.S. Department of Education, the research indicates that participating in peer tutoring during the first year has a positive and statistically significant impact on students in each of three outcome areas: grades, credits and retention. Greater involvement in tutorials results in greater impact, and participation in the first year has an even bigger payoff for students than in later years (Chaney at el, Inc. 1997).

Over the years tutoring has earned credibility as an academic intervention because it actively involves students in their learning. Research suggests that the more time and effort students invest in the learning process, the greater will be their personal growth and academic achievement. Rosenshine's work (1982) showed that learning is maximized when the learning environment is structured to encourage active participation by the student. The concepts of time-on-task and effort appear frequently in literature as key determinants in cognitive growth (Bloom, 1974; Boyland, 1979; Fisher et al., 1980; Gagne, 1977). In a 1979 analysis of 3,006 student responses from 11 colleges and universities, Pace (1984) found that the most reliable predictor of achievement in college was not who the student was (student characteristics variables), or where the student attended college (college status and college environment variables), but what the student did at school (quality of effort variables). These results were reaffirmed in a 1983 study of 2,299 students at 8 colleges (Pace, 1984).

In addition, student involvement correlates with satisfaction in educational experiences. Students who are most satisfied with college put the most into it and get the most out of it. An analysis of a cross-section of UCLA undergraduate responses to the College Student Experiences questionnaire in 1979 found that students who put forth high quality effort believed that they were developing their intellectual powers, found their university environment to be friendly and supportive and expressed satisfaction with their college experience (Pace, 1984).

Through his study of college dropouts, Astin has shown that persistence too is related to student involvement. While identifying factors in the college environment that affected student persistence, Astin discovered that virtually every factor could be rationalized in terms of the involvement concept. Factors that contributed to the student's remaining in college suggested student involvement, whereas those that contributed to the student's dropping out implied lack of involvement (Astin, 1984).

The importance of this rationale for tutorial services can be seen not only from the perspective of experts who have studied the significance of actively involving students in their learning, but from that of practitioners in the field who work daily with students. Brighid Blake, SSS Director at Drexel University, points out the importance

of connecting students with a service they intuitively know offers them the academic support they want:

> **"As a director of support programs for nine years, I became aware that all assessment and analysis of student need pointed to academic support, and tutoring in particular, as the most important core service related to academic survival for underprepared students; it was also the one students were most aware of needing, and therefore, most willing to use."**

Tutoring, in whatever style we choose to make it available, provides us with the opportunity to personalize learning for students. We can meet students where they are and with challenge and support guide them in specific learning activities that help them make the academic progress that leads to graduation.

Key Issues in the Design and Implementation of Tutorial Services

Not all tutorial programs have the same potential to improve student learning. It is increasingly recognized that generalized approaches to tutorial assistance tend to be far less effective than those efforts targeted at specific aspects of learning within a particular course structure or a discipline. With the goal of helping students persist to graduation, tutorial services must provide support that is comprehensive in scope and integrated into the campus mainstream. In this section, we will consider the following key issues:

Institutional Context: How does the structure of tutorial services influence student learning and retention? What formats for service are programs currently using?

Tutor Selection, Training and Support: How can we find good tutors? What training helps tutors meet the needs of SSS students? What support helps tutors do a good job?

Program Evaluation and Outcomes: How do we measure a program's success? What data do we need to collect?

Non-cognitive Factors: What can we do to increase student readiness for academic improvement and support? How can we encourage students to connect with appropriate resources?

Cognitive Factors: How can tutorial services promote learning? How can tutoring help students become strategic learners?

Key Issue #1: Institutional Context

All programs serve their constituents within a context, and the importance of institutional context should not be underestimated. In Raising Academic Standards: A Guide to Learning Improvement, R. Talbott Keimig asserts that "The organizational structure of the learning improvement program extends or limits its effect on achievement and retention more than any other single characteristic of the program". Keimig then goes on to differentiate programs based on the extent to which they provide comprehensive support services to meet students' learning needs and the extent to which they are integrated into the academic mainstream of the institution.

In Keimig's first level of programming, learning assistance for individuals, the institution assumes that the student has a problem, which he or she can overcome through independent study and tutorial assistance. If students seek help, they will receive both personal attention and academic assistance to offset their low self-esteem and poor study habits. The advantage of assistance at this level is that students receive direct help with their academic coursework in a format that usually provides social and psychological as well as cognitive support. The potential disadvantage of services at this level is that it relies on the student to seek help. A student is most apt to walk in to the tutoring service after a failure occurs, thus receiving help that is too little and too late. For a variety of reasons, which range from tight schedules to doubt that anyone can help, students who need assistance the most tend to avoid it.

Keimig's next level of programming is course-related learning services. At this level the institution assumes that student learning needs exist because of the nature of the course itself rather than because students are deficient. The college must provide whatever extra instruction is necessary to bridge the gap between students' skills and knowledge at entry and those required to master the course material. Supplemental instruction typically provides such a service, but tutoring can too; it just looks a little different. Rather than wait for students to walk in for help or work only with students who come to SSS seeking assistance, tutoring is linked to the course through contact with the faculty member teaching it. Together, SSS and faculty work to select tutors, media and learning experiences that will help students succeed in the course.

At the top of Keimig's hierarchy are comprehensive learning systems. At this level the total learning needs of students are integrated into the development of the curriculum; the instructor uses a variety of resources and techniques to maximize students' involvement in the course and their commitment to learn. Courses are designed according to principles of learning theory; students' overall developmental needs provide the basis for the instructor to adjust teaching strategies and learning experiences. In order for this to happen, lower level support (such as tutorial services) must be in place to provide auxiliary learning experiences. Collaboration with personnel in SSS helps instructors gain the experience and knowledge necessary to meet the needs of all students.

While some tutorial programs fit neatly into one level of Keimig's hierarchy, many work throughout the levels. Depending on the campus political climate or a department's receptivity to academic support services for its students, staff in Student Support Services may sometimes find themselves providing tutorial assistance to individual students, while at other times their efforts are more closely linked to the faculty member and the course itself. Wherever SSS efforts are at the moment, it is critical to keep two key questions in mind: How does the structure of this tutorial service influence student learning and persistence? How can these tutorial services promote a campus climate that supports student learning and success? SSS serves the student who is with us today, but it also can work to create a campus that is ready to interact successfully with this student throughout the curriculum.

To get a better idea of what the institutional context looks like on specific campuses, we will describe four projects and their institutions. Before we describe their offerings, here is a brief overview of each institution and its services.

Drexel University Student Support Services
Director: Brighid Blake

Drexel University in West Philadelphia is a private co-educational university with an enrollment of 4,665 students. Drexel received its first TRIO grant seventeen years ago, and in January 1995 added Tutorial Services to its programming. SSS is currently funded to serve 225 students, and tutorial assistance is provided by an Academic Coordinator who works with 35 graduate students and peer tutors.

Campus Statistics:

Six-year graduation rate of student body:	60.0%
Six-year graduation rate of SSS:	63.0%
Percentage of students who are low income:	31.0%
Percentage of students who are first generation:	41.0%
Percentage of students with disabilities:	1.6%

Luther College Student Support Services
Director: Janice Halsne

Luther College in Decorah, Iowa is a private four-year residential college with an enrollment of 2,409 students. Receiving its first TRIO grant in 1973, Luther College designed and implemented its Peer Tutor Program during the 1991-1992 academic year. Student Support Services is currently funded to serve 150 eligible students. The staff consists of a director, two academic specialists, one program secretary, two student office assistants, and approximately 60 peer tutors.

Campus Statistics:

Six-year graduation rate of student body:	74.0%
Six-year graduation rate of SSS:	60.0%
Percentage of students who are low income:	16.0%
Percentage of students who are first generation:	24.0%
Percentage of students with disabilities:	1.1%

University of Wisconsin-Eau Claire Student Support Services
Tutorial Coordinator: Patti See

University of Wisconsin-Eau Claire is a public residential institution with an enrollment of 9,900 undergraduates' students, 3,000 of whom are grant eligible. Approximately 200 SSS students use the tutorial services each semester. Services are provided in the Academic Skills Center, which is supported through both grant and campus funds. Staff members include five part/full-time professionals and 50 to 100 peer tutors per semester.

Campus Statistics:

Six-year graduation rate of student body:	51.0%
Six-year graduation rate of SSS:	46.0%
Percentage of students who are low income:	18.0%
Percentage of students who are first generation:	38.0%
Percentage of students with disabilities:	4.0%

Southwest Texas State University
Director: Rita Quinonez

Southwest Texas State University is a public residential institution with an enrollment of approximately 21,000 students. Student Support Service (SSS) is under the umbrella of Multicultural Student Affairs along with the other TRIO Programs of Upward Bound, Rural Talent Search and Urban Talent Search. A Student Support Services Program has been in operation at Southwest Texas since 1984. Currently SSS is funded to serve 200 eligible students. The staff consists of a director, coordi-

nator, secretary, two student office assistants, and 13-20 tutors.

Campus Statistics:

Six-year graduation rate of student body:	32%
Percentage of students who are low income:	9%
Percentage of students who are first generation:	43%
Percentage of students with disabilities:	2%

With this overview of the four programs in mind, let's look at what structure each has selected for its tutorial services as they design and implement a program for their specific campus.

Drexel University Student Support Services provides individual tutorials to all students requesting them. This tutoring can involve meeting one-to-one with a tutor, visiting over e-mail, or working on a computer-assisted tutorial. For students who prefer group work and carry at least a 'C' average, group tutorials are offered. Weekly reviews provide reinforcement for students who want to focus on specific course material and faculty and/or tutors conduct mid-term and final examination review sessions prior to each exam. Students enrolled in "high-risk" or "barrier" courses are encouraged to attend supplemental instruction sessions with a high-achieving peer or staff member who is also enrolled in the course. For more general assistance, students can attend workshops on topics dealing with study skills, problem solving and strategies for taking tests. Drexel University SSS is proud of its two-year effort to develop tutorial services that are comprehensive and integrated into the campus mainstream. Director Brighid Blake states that previous campus tutorial services "lacked the comprehensive range and depth of service we needed and lacked the flexibility to adapt the amount of service to the needs of the students. We believe our new service is now having a positive impact on academic achievement and retention."

Luther College Student Support Services offers course-specific one-on-one assistance to students. Director Janice Halsne says that these tutorial services reflect the program's philosophy that "early intervention, regularly scheduled sessions, and continuance of these sessions through to the final exam offer participants the opportunity to experience academic success." During the 1995-1996 academic year, for example, 74 SSS participants were assigned peer tutors no later than the 7th week of the 16-week academic term. Seventy of the 74 earned a 'C-' or above in the course in which they were tutored (a 95% success rate) and 73 of the 74 participants returned to Luther College in Fall 1997 (a 99% retention rate). Such success seems to be a natural result at Luther College when a student connects with a tutor, commits to meet

the tutor for a minimum of three hours per week at a scheduled time, and agrees to be prepared for all sessions. The student provides the peer tutor, who is knowledgeable in the content area, with a syllabus for the course and together they set goals for their sessions. Missing more than two meetings per semester can lead to cancellation of tutoring, so students are encouraged to keep their appointments. Ms. Halsne stresses that SSS helps students set clear goals for a course and allows them connect with someone who cares about their success. The program also increases the retention/success rate of the general student population because it provides both a sense of community and financial support to 60-80 peer tutors and encourages them to return the next year.

The **Academic Skills Center at University of Wisconsin-Eau Claire** provides both content and study skills tutoring. Content-area tutoring is designed to help students successfully meet the standards of courses specifically required for graduation, such as Biology, Chemistry, Statistics, and foreign language. Tutoring in study skills includes learning strategies for taking lecture notes, managing time, reading college texts, and taking exams. Tutoring is also available to assist students in improving their reading, writing, mathematics and English-as-a-second-language skills. Approximately 200 students use the tutorial services each semester, with 119 students of color attending an average of eight sessions per semester and 61 students with disabilities attending an average of 12 session per semester. Specialists in reading and study skills, writing and mathematics and English-as-a-second-language, design individual student programs and supervise all tutoring in their respective areas. According to SSS Coordinator Patti See, the program has grown4o be a major force for institutional change, advocating and modeling a supportive campus climate for student development, growth, and graduation. The staff motto "Students go where invited and remain where appreciated' is now being advanced campus-wide". As evidence of its support, the University contributes over $130,000 to the program each year. Of the seventeen campus services offered through SSS, students rated tutoring as the second most-valued service (advising was ranked number one).

Southwest Texas State University offers one-on-one peer tutoring for specific courses and study skills. The program concentrates on common classes taken by first and second year students. Currently all tutoring is one-on-one, however, the program plans to offer computer-assisted subject tutorials in the near future. Students are also encouraged to seek additional tutoring offered through Supplemental Instruction, the Student Learning Assistance Center, the Athletics Academic Center, the Writing Center and the Math Lab. Students meet with their tutors every week for 1-3 hours depending on their needs and schedules. Missing more than two meeting per semester can result in being terminated from the program.

Key Issue #2: Tutor Selection, Training, and Support

A tutoring program is only as strong as its tutors. How can we find good tutors? What training helps tutors meet the needs of SSS students? What support helps tutors do a good job? Anne Wilcox and Andrea Reeve have conducted an extensive review of the literature on tutor training and have identified some of the key characteristics (1993). They include:

Topics: Among the most common topics are orientation to the program (philosophy, goals, procedures, students,) interpersonal communication skills, learning theory, teaching strategies and questioning techniques, as well as subject specific information.

Methods: Programs often use videotaped tutoring sessions (commercial and project produced), role-playing, modeling and lecturing. Role playing is considered particularly effective.

Formats: Common approaches are day-long workshops or regularly spaced shorter sessions. Training concurrent with tutoring allows participants to try out new skills. Training is conducted by project staff as well as professional trainers and some training is accompanied by class credit.

Evaluation: Discussion and feedback among tutors and their supervisors is the most common approach. Some programs use written evaluations by tutors to learn and improve.

While noting that there has been little study of the effectiveness of training, Wilcox and Reeve conclude with recommendations that tutor training emphasize both tutoring content and learning theory (the process of tutoring). They also recommend that programs work toward training courses that carry college credit. Now let's examine how our model programs train their tutors.

At **Drexel University** the Academic Coordinator hires, trains and supervises a staff of faculty, graduate students and peer tutors who provide individual tutoring in all regular courses as well as group tutorials, weekly reviews, exam reviews and academic skills workshops. Faculty members volunteer their services for tutoring. When hiring tutors, the Academic Coordinator makes a special effort to find tutors who are members of groups that have been traditionally underrepresented on the Drexel campus. All peer tutors must have a GPA of 3.0 or higher and advanced SSS students, students in the Honors Program and students recommended by faculty or peers make up the typical Drexel tutorial staff. Tutor training incorporates a learning styles inventory and an integrative learning model that helps the tutors develop

a basic understanding of learning processes and individual learning styles. Tutor training emphasizes the delivery of help in course-specific areas and in the general development of college-level coping skills.

To ensure that they find quality peer tutors, **Luther College** SSS works throughout the year to identify and select qualified Luther students who are interested in tutoring. The Academic Support Specialist contacts Luther faculty to find out names of students who have earned a minimum of a 'B+' in their courses, demonstrated good study skills and indicated an interest in tutoring. The program also posts advertisements and position announcements to let students know that tutoring positions are available. Interested students fill out an SSS Tutor Application Form, obtain a minimum of two written recommendations from Luther faculty and administrative staff, and interview for the position. If hired, the tutors meet with the Academic Support Specialist for one hour to discuss the Student Support Services Tutor Handbook, learn about instructional aids available to support their work with SSS participants, and pick up a resource guide to help connect with other tutors and the teaching faculty. Tutors are then required to attend eight hours of tutor development workshops throughout the year on topics that pertain to teaching skills, various aspects of the tutoring relationships, and suggestions for working with students with disabilities.

Peer tutors at the **University of Wisconsin-Eau Claire** are students in good standing who have earned at least a 'B' in courses for which they provide tutoring. Coordinator Patti See recruits potential tutors each term by contacting faculty of targeted courses and the American Ethnic Coordinating Office for recommendations. As an instructor of developmental courses on learning strategies, critical thinking and critical reading, Ms. See also checks the degree progress of her SSS "alumni" to find students who are now successfully navigating the university system. Once hired, peer tutors complete six hours of formal training at the beginning of the term. Professional staff provide sessions for the tutors on differences in communication styles and learning styles as well as lead discussions on various learning strategies. Follow-up training during the semester connects tutors with a two-hour group session on specialized topics such as cultural diversity. After several weeks of working with students, the tutor meets with the coordinator for a 30-minute individual session to discuss student progress, difficult situations, etc. At the end of the term, peer tutors collect feedback from their students in order to continue to improve their tutoring skills.

Tutors at **Southwest Texas State University** are hired, trained and supervised by the coordinator. Tutors must have completed 45 credit hours and have a GPA of 3.0 or better in classes they are tutoring (and overall). The coordinator recruits tutors from a variety of sources including student organizations, classes, student and faculty

recommendations and general campus advertising. Special attention is given to diversity in the hiring of tutors. It is important to the staff of SSS that tutors represent a variety of cultures, races, ethnic groups and genders. Interested students complete a Tutor Application and must submit two recommendations from faculty members in the subject areas that they wish to tutor. Tutors participate in an initial private training session with the coordinator. The coordinator assesses the area in which tutors need further development and continues to meet with tutors on an individual basis as needed. Tutors also attend regularly scheduled monthly meeting to discuss issues and participate in further training. The coordinator develops training materials with assistance from tutors, other professional staff members and or/ faculty on campus. Tutor training subject areas include working with students with disabilities, learning styles, study skills, campus resources, working with computer-assisted subject tutorials and developing tutoring relationships.

Key Issue #3: Program Evaluation and Outcomes

How do we measure a program's success? What data do we need to collect? What kind of results are these programs getting? Tutoring lends itself to evaluation more than other services. Projects can focus on short-term student outcomes that are directly related to tutoring (such as course grades and GPA), as well as longer term outcomes (such as college retention). In addition, comparison groups for short-term outcomes are relatively easy to identify and include SSS participants in the same courses who did not receive tutoring or other course participants (especially in developmental courses). For projects that maintain computerized records of session attendance, it is also possible to look at the amount of tutoring students receive in relation to the outcomes they achieve, as well as the relative performance of different tutors.

Although its tutoring program is relatively new, **Drexel University** reports that the number of students, number of contacts and number hours of tutoring provided more than doubled in the last year. Academic standing of participants increased by 4 percentage points in two years of service, with the retention rate of students increasing by 3 percentage points during the same period. Though it is too soon to measure the impact of this two-year-old program component on graduation rate, Drexel is projecting that the rate will increase 7% (from 63% to 70%) by the year 2000.

Luther College too has found that one-on-one course-specific peer tutoring does make a difference in academic achievement and persistence to graduation. In 1990-1991, the year before the current peer tutor program was implemented, the 5-year graduation rate for SSS participants was 47%. With the implementation of the peer tutor program, the 5-year graduation rate (enrolled Fall 1991) and 4-year graduation

rate (enrolled 1992) have increased from 47% to 60% and 69% respectively. Such a dramatic improvement results not only from the basic structure of the tutorial services, but from the monitoring of participant's progress throughout the intervention. Faculty and SSS work together to provide timely and intensive support for tutorial service participants through the Continuous Reporting System (CRS). When a participant is reported on CRS as showing "negative academic progress", the Academic Support Specialist works with both the peer tutor and participant to determine how the student might improve. Students learn that if they are willing to put in the effort, they are part of a team that will help them succeed.

Students who participate in tutorial services at the **University of Wisconsin-Eau Clair** are showing positive results too. Prior to the availability of content-area tutoring in classes required for graduation, only 39% of SSS students earned a grade of 'C' or better in these courses; now 75% achieve that goal. Figures which describe the level of academic achievement for specific populations for Spring 1996 show that 53% of students of color and 82% of students with disabilities scored a 'C' or higher in classes in which they received tutoring services.

Students who participate in tutorial services at **Southwest Texas State University** are showing positive results. The SSS Program provides tutorial services to the 200 participants enrolled in the program. On average, 83.5% of the students enrolled in SSS have met institution academic performance levels required to stay in good standing. The SSS Program averages 3,041 tutor contact hours per year.

Key Issue #4: Non-Cognitive Factor

As the outcomes from students participating in tutorial services at Drexel University, Luther College, the University of Wisconsin-Eau Claire and Southwest Texas University illustrate, tutoring is an academic intervention that can lead to student success and persistence. Experienced Student Support Service staff realize that simply providing a quality academic resource for students does not guarantee that they will use it. Students in academic difficulty do not always connect with the campus resources designed to assist them. What can we do to increase student readiness for academic improvement and support? How can we encourage students to connect with tutorial resources?

Understanding Students' Initial Reactions to Academic Difficulty

We can start by understanding students' reactions to academic difficulty. While it's natural to assume that students will react to academic difficulty much as we think we would, the reality is that students have a wide range of responses. Typically, student responses fall into the following areas:

Acceptance	"I want to get my degree and right now I'm going nowhere fast. Guess it's time to figure out what's going wrong and make some changes."
Denial	"This really isn't a problem; I just need to get my act together. Things will get better."
Shock	"How could this happen to me? I should be doing a lot better; I'm an intelligent person."
Blame	"How can anyone do well at this place? My classes are huge and the instructors are terrible."
Shame	"I'm so embarrassed. What will people think of me? I should be doing better."
Despair	"Nothing I do seems to make any difference. Who was I to think that I could make it in college? I really don't belong here."

Students who respond to their academic difficulty with acceptance want to start talking with someone right away about what their first steps to academic improvement might be and they are very receptive to information about tutorial resources. These students are ready to do what is necessary to get on track to earn a degree. But students who respond with one or more of the other reactions may not be as ready to act. Much like someone grieving over a loss, the student is coming to grips with the message that his or her low grades is delivering. The student realizes that the academic standards of the college are not being met--and for someone who hoped (or even expected) to make the grade, this news can be difficult to absorb.

Trying to involve such students in a solution to their academic difficulty at this point often does not work because their attention is focused on reacting to what happened. But reflecting on what happened is one thing; mourning over great grades that did not materialize, indicating the system for being less than perfect and despairing that anything can be done to get different results the next term can turn into a vicious cycle. It is easy for a student to get lost in the details of a particular reaction to academic difficulty or to recycle several of the reactions over and over again. When students are left on their own, they run the risk of getting stuck with their reactions as well as using up precious time to deal with the news, time not built into the academic term. Because it is in the interest of neither the institution nor the students when these reactions interfere with progress toward a college degree, it is critical that we hear where students are with their academic difficulty.

> If students think that the problem of academic difficulty will go away on its own or that it can't be solved, they won't try anything new. If they feel ashamed or fear that exposing their status to others could make them appear inadequate, they may not look for help. If they believe that it is impossible to succeed in a particular class or learn from a certain teacher, then they may not be willing to experiment with different strategies for learning (Weinsheimer, 1993).

Finding out students' reactions to their academic difficulty is not difficult; we simply need to ask. When we hear a student respond in a way that does not seem helpful, we can acknowledge that such a reaction is understandable given what the student has just described. But then we can begin to help the student reframe the response. We can introduce the idea of choosing a reaction to academic difficulty, remarking on how we've found that what students think about their situation has an impact on how they feel about themselves and what they do. We can involve students in thinking about the pitfalls--as well as the usefulness--of different responses to academic difficulty. We can ask students what reaction to their academic difficulty would give them the most power, or energy, to do what needs to be done on a daily basis to turn their situation around.

Understanding students' reaction to academic difficulty is a critical first step to helping them connect with tutorial services. If students' initial reactions to the news of academic difficulty zap the energy they need for change or if their reactions focus their energy in non-productive directions, a college's offer of assistance to students will go unheard. Academic difficulty is a signal to students that all is not well. How students respond to this signal is key to what happens next.

Assessing Students' Readiness for Change

Colleges hope that students in academic difficulty will heed their warning and make the changes necessary for improvement. But students vary in their readiness for change. Some students react to the news that they are in academic difficulty, put their failure in perspective, and take action. Others listen to what's needed, then proceed as before. What accounts for the difference?

According to researchers who have studied how individuals intentionally alter their behavior, there are five stages involved in the process of change (Prochaska, DiClemente, & Norcross:1992). The stages can be described as follows:

Precontemplation: Individuals in this stage are either unaware or underaware of their problems and have no intention of changing their behavior in the next six months. If they do connect with help, it's because someone has pressured them;

when the pressure is off the individual returns to old habits. Individuals in the pre-contemplation stage of change resist recognizing or modifying problems.

Contemplation: Individuals are aware that a problem exists and are thinking about overcoming it, but they're not ready to take action yet. They are struggling with the amount of effort, energy and loss that the resolution to the problem might require. Individuals in the contemplation stage know what they want to achieve, but they are not quite ready to make it happen

Preparation: Individuals are intending to take action, but they know they have been unsuccessful in taking action in the past. They have made some small changes that have reduced the problem; they have yet to be effective in a significant way. They are getting ready to take action in the next few weeks.

Action: Individuals change their behavior, experiences, or environment in order to overcome their problems. They modify the target behavior to an acceptable criterion for a period of one day to six months. Efforts tend to be visible and they usually require considerable time and energy.

Maintenance: Individuals work to avoid relapse and to stabilize the gains they achieve during the action stage. Change continues as the individual works to stay free of the problem and to use new behaviors for at least six months.

Research on the stages of change have usually involved the study of people who are trying to alter addictive behaviors such as cigarette smoking, alcohol abuse or obesity. But from the perspective of Prochaska, DiClemente, and Norcross, neither the specific problems that people are dealing with nor the techniques used to help them overcome these problems has an impact on the underlying structure of change. Their Transtheoretical Model emphasizes the need "to assess the stage of a client's readiness for change and to tailor interventions accordingly. Efficient self-change depends on doing the right things (processes) at the right time (stages)".

Recent research suggests that the structure of behavioral change proposed in the Transtheoretical Model may be descriptive of the process students go through as they address academic problems (Topitzhofer, 1995). Using a cross-sectional, correlational design to evaluate the usefulness of the Transtheoretical Model for describing and predicting academic behavioral change for students on academic probation at a large public university, the study found that the student's stage of change contributed significantly to his or her academic performance:

Substantial increases in grade point average and coefficient of completion were observed with progression from contemplation to action to maintenance. The average fall quarter grade point average of students in the maintenance stage was nearly twice that of students in the contemplation stage. Subjects in the maintenance stage completed 43% more attempted credits with successful grades than subjects in the contemplation stage (Topitzhofer, p. 70).

Many of our current efforts, which assume that students in academic difficulty are at the action level of change, are leaving out students at the earlier stages of readiness. Such students either choose not to participate in tutorial services or to participate passively. Investing little energy in the intervention, the students resist recognizing that change is needed. When students in the precontemplation or contemplation stages of change gain insight into what might make a difference to their success, they often reject the solution to their problem because of what they feel it suggests about them or because of what it seems to require of them. The students are not ready to take action. What can we do to help students move to the action stage?

In their recent book Changing for Good, Prochaska, DiClemente, and Norcross tell us that **Precontemplators** are powerless to change without assistance. Because they see no need to change (and we do!), it's tempting to nag (I've asked you to sign up for tutoring several times now) or to push (I've made an appointment for you to meet with a tutor). But nagging weakens our relationship with the student and pushing encourages resistance (You can set up an appointment but you can't make me come). Instead, consider talking with the student about what's happening, give feedback, and describe what you see. The student may be ready to consider changing and we want to encourage this inclination.

Contemplators are interested in making some changes, but they also resist it. What if tutoring doesn't make any difference? What if tutoring means more time studying? Why can't students just earn 'A's' by attending classes? We help students most at this stage when we understand their ambivalence. After all, action may bring failure or action may mean a change in lifestyle; no wonder wishful thinking becomes attractive (I want to take 18 credits, work 40 hours, spend time with my kids--and get great grades). Yet we can contribute to the change process by asking questions and helping the student gain greater awareness about both the problem and options for improvement. Sharing the observation that students in similar situations have found tutoring valuable or discussing the pro's and con's of connecting with a tutor can move the student toward the Preparation Stage.

Students "get ready" in the **preparation** stage. They start looking more to the future learners they would like to become and less toward the problematic past.

Preparation helps students build a bridge between the ideas they've been considering in the contemplation stage and the specific steps they take in the action phase. This is a good time for us to help students consider possibilities as well as discuss how they might handle unexpected challenges or set-backs. What if the student meets twice with a tutor and doesn't see dramatic results on the next exam? How much time and effort will it take to earn a 'C' in the course if the current grade is an 'F'? Making tough choices and realistic preparations now will help students be successful in the Action Stage.

Action is the busiest period of the change process. We see students meeting with tutors and trying out new study strategies. It's important that we support students in their action steps, this stage involves trying out new behaviors and building new habits. Students are on the right track, but there may need to be course corrections along the way; few plans work without making minor adjustments.

Once students arrive at the action stage we often feel we've accomplished our goal, but Maintenance is also an important stage. Students have experienced success and now the challenge is to experience it once more. Some of the same factors that made academic achievement elusive in the past will present themselves again. Is the student ready to handle these challenges? As we help students determine what to watch for, we can discuss options for dealing with future situations.

Some students move quickly through the change process, while others take a long time. Since tutorial services function within an academic term, we'd prefer that students move quickly through the early stages; our programs, after all, specialize in the Action stage. Yet providing effective tutorial services means meeting students where they are and helping them move forward. Assessing students' readiness to change helps us realize exactly where our challenges lie.

Key Issue #3: Cognitive Factors

Participating in a tutorial program can help students learn course content. The assistance that tutors provide connects students with a personal guide who understands the material and is willing to help the student understand it too. Yet we want to do more than transfer information from one knowledgeable head to another. How can we help students become independent learners who in the future will be able to take charge of their own learning? Is there a way we can use tutorial services to promote this type of learning?

There are many approaches to improving student learning, but typically they fall into two broad categories (Biggs: 1988). Prescriptive methods suggest that we teach stu-

dents techniques and skills and tell them when and how to use these strategies. While this approach is fairly common, research on the effectiveness of the prescriptive method varies. At first, students seem pleased to find a new way to take notes or a different way to review for an exam, but then many return to their old way of doing things; once away from the tutorial setting, students tend to do what they've always done.

The second way of improving student learning is a learner-centered method. Rather than prescribe what they should do, this method helps students become aware of who they are as learners and what their choices are for learning. In an article titled The Role of Metacognition in Enhancing Learning John Biggs gives the rationale for this method:

> **One of the interesting characteristics of people is they not only behave, but can watch themselves behaving, and believe that they can exert a certain amount of control over how they behave. People are...active agents who can be aware that things are or are not going as intended, who can deliberately optimize their performance, and who can learn from becoming aware of their mistakes. (1988).**

Becoming aware of cognitive processes and exerting control over them is known as metacognition, or learning how to learn. Biggs points out that this distinction between prescriptive and metacognitive ways of learning parallels an earlier distinction made by Snowman (1986) about tactical and strategic ways of learning:

> **As in the military basis of the distinction, tactical learning is short term: the learner obeys the algorithmic orders while on learning maneuvers. Strategic learners first survey the field, then make plans and coordinate resources; they are aware of the task demands and of the capabilities of their task force.**

In order to help students who participate in our tutorial services improve their ability to learn on a long-term basis, we must help them be strategic rather than tactical in their approach to completing their coursework in college. Rather than just carry out our orders, students must become partners in the tutoring process who make active choices about how to complete their learning. We shift the emphasis in the tutorial session from giving advice (which considers the situation from our point of view) to coordination and collaboration (which involves the student in the process of change). We work with students to:

- **assess what is happening.** What makes a particular course difficult? Does the

difficulty pertain to the requirements of the course itself, or is the student attempting too many credits or working too many hours on a job to have time to do well?

• **reframe negative academic experiences.** Even though the student did not get the results that were hoped for, what learning took place? What does the student know now that he or she didn't know before? What might this experience suggest about next time?

• **resolve the dissonance between expectations and the realities of the educational environment.** What assumptions did the student have about learning in college that now do not seem true? What does the student's experience suggest about what to expect in the future?

• **help them become agents of their success rather than victims of failure.** What's one specific step toward academic improvement that the student can take today? Who can the student count on for support when the going gets tough? What can the student do when progress gets difficult?

Discussing these issues helps students take charge of their learning. By facilitating discussion, tutors help students become strategic learners who know what they want and what their options are for making it happen. Rather than just telling students what to do, tutors help students become aware of who they are as learners and what they can do to meet the demands of the curriculum. Tutors help students make a plan for their success in a particular course and help students learn how to monitor their progress. Making adjustments is part of strategic learning and tutors help students understand that they can use what they're finding out about the process of learning to help them succeed.

Conclusion

With the goal of helping students persist to graduation, tutorial services must work with administrators and faculty to provide a campus environment which is capable of educating a diverse array of learners. Support in such an environment must be comprehensive in scope and integrated into the academic mainstream. Rather than "fix" students who do not seem to be learning quickly enough or well enough, tutor-

ial services collaborates with others at the institution to build a campus climate that promotes student success. Attention to key elements such as learning assistance for individual students, course-related learning services, and system-wide interventions gives tutorial services an opportunity to improve student learning and retention. Also critical to the success of our programs is our ability to assess students' individual needs and situations, to promote their interest in academic improvement and increase their readiness to engage in the change process. Students working with peer and professional tutors, whether on an individual or group basis, can then participate in a learning community which is holistic in its approach to helping them become active learners who achieve success on campus. ◆

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